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18. The printable film according to claim 17, wherein the substrate is selected from the group consisting of polymer films, polyolefin films, papers, synthetic papers, woven fabrics, nonwoven fabrics, ceramic sheets, metallic fiber sheets, metallized sheets (film), metallic foils, metallic plates, and multilayer composite sheets formed by combination of said materials.

19. The printable film according to claim 18, wherein the substrate is an oriented polypropylene film.

20. The printable film according to claim 17, wherein the water dispersible polymer consists essentially of a homopolymer of (meth)acrylic acid or alkyl (meth)acrylate, the alkyl radical having 1 to 10 carbon atoms, or a copolymer of two or more of said monomers or optionally of other vinylic or allylic compounds.

21. The printable film according to claim 17, wherein the water dispersible polymer is a urethane or urethane acrylate polymer.

22. The printable film according to claim 17, wherein said surface layer further comprises a cross-linking agent in an amount of from 1 to 5 % by weight of the water dispersible polymer.

23. The printable film according to claim 17, further comprising, between said substrate and said surface layer(s), a primer layer.

24. The printable film according to claim 17, wherein only one face is coated with a surface layer and in that the reverse face of the substrate is covered with a pressure-sensitive adhesive layer.

25. A process for the manufacture of a film, printable with radiation curable inks, said film, comprising a substrate and at least a surface layer, said layer covering at least one face of

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said substrate and consisting essentially of 10 to 98 % by weight of a water-dispersible polymer able to provide a smooth film surface for printing and 2 to 90 % by weight of an ethylenically unsaturated compound selected from polyfunctional acrylates resulting from the esterification of a polyol with (meth)acrylic acid or polyallyl derivatives, whereby said surface layer does not contain an addition polymerization photoinitiator and is unpolymerizable with radiation, comprising coating at least one side of the substrate with an aqueous dispersion comprising the water dispersible polymer and the ethylenically unsaturated compound and drying the coating.

26. The process according to claim 25, wherein the aqueous dispersion comprises further a crosslinking agent.

27. The process according to claim 25, wherein it comprises a further step of priming of the substrate, before applying said aqueous dispersion.

28. A process for the manufacture of a printed film comprising

- a) coating a substrate with an aqueous dispersion comprising a water dispersible polymer able to provide a smooth film surface for printing and an ethylenically unsaturated compound selected from polyfunctional acrylates resulting from the esterification of a polyol with (meth)acrylic acid or polyallyl derivatives, whereby said aqueous dispersion does not contain an addition polymerization photoinitiator;

- b) drying the coating so obtained;
- c) inking the dried coating with a radiation curable ink; and
- d) curing the ink with UV or EB radiation.

29. A printed film obtained by inking a printable film with a radiation curable ink and by curing said ink with radiation, said printable film comprising a substrate and at least a surface layer, said layer covering at least one face of said substrate and consisting essentially of 10 to 98 % by weight of a water-dispersible polymer able to provide a smooth film surface for printing and

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2 to 90 % by weight of an ethylenically unsaturated compound selected from polyfunctional acrylates resulting from the esterification of a polyol with (meth)acrylic acid or polyallyl derivatives, said surface layer containing no addition polymerization photoinitiator.

30. A label obtained by inking of a printable film with a radiation curable ink and curing said ink with radiation, said printable film comprising a substrate and at least a surface layer, said layer covering at least one face of said substrate and consisting essentially of 10 to 98 % by weight of a water-dispersible polymer able to provide a smooth film surface for printing and 2 to 90 % by weight of an ethylenically unsaturated compound selected from polyfunctional acrylates resulting from the esterification of a polyol with (meth)acrylic acid or polyallyl derivatives, said surface layer containing no addition polymerization photoinitiator, wherein only one face is coated with a surface layer and in that the reverse face of the substrate is covered with a pressure-sensitive adhesive layer, said film being combined before or after printing with a pressure sensitive adhesive layer and a release film.

31. A container labeled with a label according to claim 30.

32. The container according to claim 31, which is a bottle.